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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/694,554      | 10/23/2000  | Richard O. Moore JR. | G-0004              | 9964             |

7590 05/13/2004

BURNS, DOANE, SWECKER & MATHIS  
P.O. BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

GRIFFIN, WALTER DEAN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1764

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/694,554 | <b>Applicant(s)</b><br>MOORE, RICHARD O. |  |
|                              | <b>Examiner</b><br>Walter D. Griffin | <b>Art Unit</b><br>1764                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4,7-11,16-18 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4,7-11,16-18 and 24-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24, 2, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Derr et al. (US 4,080,397).

The Derr reference discloses a process for hydroconverting a Fischer-Tropsch product that contains oxygenates and olefinic hydrocarbons. These oxygenates and olefinic hydrocarbons would necessarily include the specific compounds of claim 2. The process comprises preheating the feed and then admixing hydrogen with the feed to form the feed to the hydroconversion zone. Heating temperatures are within the range of claim 29. The feed is then hydroconverted. The reference discloses that some hydrogen may be added to the feed upstream of the furnace to help reduce or minimize fouling of the furnace tubes or coils. This hydrogen addition is necessarily not under hydroconversion conditions. See column 1, lines 10-13; column 2, lines 5-10, 24-40, and 64-68; column 3, lines 1-11 and 65-68; column 4, lines 1-6; and column 11, lines 5-50.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1764

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 4, 7-11, 16-18, 25-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derr et al. (US 4,080,397).

The Derr reference discloses a process for hydroconverting a Fischer-Tropsch product that contains oxygenates and olefinic hydrocarbons. These oxygenates and olefinic hydrocarbons would necessarily include the specific compounds of claim 2. The process comprises preheating the feed and then admixing hydrogen with the feed to form the feed to the hydroconversion zone. Heating temperatures are within the range of claim 29. The feed is then hydroconverted. The reference discloses that some hydrogen may be added to the feed upstream of the furnace to help reduce or minimize fouling of the furnace tubes or coils. This hydrogen addition is necessarily not under hydroconversion conditions. See column 1, lines 10-13; column 2, lines 5-10, 24-40, and 64-68; column 3, lines 1-11 and 65-68; column 4, lines 1-6; and column 11, lines 5-50.

The Derr reference does not disclose the hydrogen amounts of claims 25-28, does not disclose the temperatures of claim 30, does not disclose the amounts of olefins or oxygenates as

Art Unit: 1764

in claims 3, 4, and 7-10, does not disclose the boiling range of the hydrocarbon as in claim 11, and does not disclose the hydrogen sources.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Derr process by using the claimed hydrogen amounts because one would use only the amount necessary to provide the disclosed effect of minimization of fouling.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Derr process by using feeds having the claimed amounts of olefins or oxygenates and boiling within the claimed range because these feeds are chemically and physically similar to the feeds disclosed by Derr and therefore would be expected to be effectively treated in the process of Derr.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by utilizing the claimed hydrogen sources because the process will function effectively regardless of the source of the hydrogen as long as sufficient hydrogen is provided.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by utilizing the claimed process temperatures because one would adjust temperatures to values including those claimed as long as effective hydroconversion results.

*Response to Arguments*

The argument that the claimed process involves adding a hydrogen containing gas stream to the hydroconversion feed stream prior to any heating of the stream whereas the Derr reference discloses preheating a feed and then admixing the preheated feed with hydrogen rich gas is not persuasive because the claims do not contain the limitation that hydrogen is added prior to any heating of the stream. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The argument that the Derr reference does not disclose or suggest adding a second hydrogen-containing gas to the heated mixture is not persuasive because the Derr reference discloses a hydroconversion process as illustrated in Figure II that comprises the addition of hydrogen to the feed upstream of the furnace and comprises the addition of hydrogen to the feed downstream of the furnace. This clearly discloses the addition of the claimed first and second hydrogen-containing gas streams.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

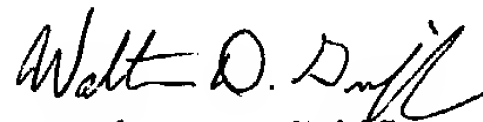
Art Unit: 1764

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Walter D. Griffin  
Primary Examiner  
Art Unit 1764

WG  
May 12, 2004